PATENT

IN THE SPECIFICATION

Please amend the paragraphs of the specification as follows:

On page 4, please replace paragraph [0020] with the following:

FIG. 1 is a conceptual block diagram of a CDMA communications system. A BSC 102 may be used to interface a wireless network 104 to a communications infrastructure 106 such as a wide area network (WAN) or a local area network (LAN). The wireless network includes multiple base stations 108a-d 108A-D each assigned to a cellular region 110a-d 110A-D. A subscriber station 112 may access the communications infrastructure 106, or communicate with other subscriber stations (not shown), through one or more base stations 108a-d 108A-D under control of the BSC 102.

On page 6, please replace paragraph [0023] with the following:

The location of the scheduler 206 is dependent on whether a centralized or distributed scheduling function is desired. For example, a distributed scheduling scheme may utilize a scheduler in every base station. In this configuration, the scheduler for each base station determines the Walsh code assignments for the subscriber stations within its cellular region independently of the Walsh code assignments in other cellular regions. Conversely, a centralized scheduling scheme may utilize a single scheduler 206 in the BSC 102 to coordinate the Walsh code assignments for multiple base stations. In any event, the scheduler 206 is responsible for the Walsh code assignments in the forward link to support high data rate services as well as conventional voice services.

On page 10, please replace paragraph [0034] with the following:

After the group of available nodes is identified, one may be selected for assignment to the second subscriber station. Selecting from the highest density sub-tree avoids splitting high-speed pipes by inefficient Walsh code assignments. Applying this criterion, one can readily see that the node 530 should be selected to avoid fragmenting the 32x-pipe represented by node 520 at level 504. The decision to select the node [[520]] 530 may be made by evaluating the number

Attorney Docket No.: 020618 Customer No.: 23696 of the unavailable nodes that can be generated for each of the available nodes within the group from its respective block of codes. In other words, for each available node 530, 532 and 534 on level 506, the number of unavailable parent nodes is determined, and the node with the greatest number of unavailable parent nodes is selected for assignment to the second subscriber station. In this example, then, it is determined that the node 530 has 2 unavailable parent nodes (518 and 516); the node 532 has one unavailable parent node ([[520]] 516); and the node 534 has one unavailable parent node ([[520]] 516). The node 530, which has the highest number of unavailable nodes that can be generated from its respective block of Walsh codes 525, is therefore selected and assigned to the second subscriber station. Of course, it then follows that all nodes representing spreading sequences that can be generated from one or more of the Walsh codes from the block 525 should also then be flagged as virtually assigned.

On page 11, please replace paragraph [0035] with the following:

FIGS. 6A-6C are flow block diagrams illustrating an exemplary algorithm that may be used to implement the fundamental concepts described in connection with FIG. 5. As described above, the algorithm is employed to assign a pipe to support forward link communications from the base station to the subscriber station. The algorithm has three components. The first component 602, in FIG. 6A, identifies the highest capacity pipe available, which is used by the second component 604, in FIG. 6B, in a manner to be described in detail shortly. If the capacity of that pipe exceeds the capacity requirements of the subscriber station, the second component 604 searches for a pipe having a capacity commensurate with the capacity requirements of the subscriber station. If the second component search is successful, a pipe may be assigned to the subscriber station. Otherwise, a third component 606, in FIG. 6C, is used to search for a pipe having the requisite capacity using a split pipe operation.

On page 12, please replace paragraph [0037] with the following:

As described above, when the highest capacity pipe available is identified, as indicated at arrow 624, the algorithm enters component 604. It should be noted that when the highest capacity available pipe is identified, all pipes that can be created through one or more split pipe operations from the highest capacity pipe available are deemed unavailable whether previously

assigned or not. Because it would be inefficient to assign a pipe with a higher capacity than needed, component 604 searches for a pipe having a capacity equal to "i," First, at decision block 626, it is determined whether the required pipe capacity "j" is greater than or equal to the index "k" of the highest capacity pipe available. If so, then at block 628, the algorithm selects the highest capacity pipe identified at component 602 to support the forward link transmission between the base station and the subscriber station, and the process terminates at block 630. Otherwise, an index variable "n" is initialized to the value of current index "k" at block 632, and the search for a lower capacity pipe is commenced. At block 634, index "n" is shifted down one level on the tree structure, and at decision block 636, it is checked whether the shifted index "n" has passed the "0" level of the tree structure. If so, then the search for a pipe having a capacity equal to "i" has failed, and the algorithm proceeds to component 606 for a split pipe operation. Otherwise, the algorithm determines at decision block 638 whether pipes at the shifted index "n" level are available. If pipes at that level are not available, the determination continues in an iterative fashion, as indicated by arrow 640, until an available lower capacity pipe is found. At that point, it is determined at decision block 642 whether the pipe at the shifted index "n" level is equal to the required pipe capacity "i." If so, then at block 644, that pipe is used to support the forward link transmission between the base station and the subscriber station. Otherwise, it is determined at decision block 648 whether the required pipe capacity "i" is smaller than the capacity of the pipe at the shifted index "n" level. If not, then the algorithm proceeds to component 606 for a split pipe operation. However, if the required pipe capacity "j" is determined to be lower than the capacity of the pipe at the shifted index "n" level, then index "k" is set to the current value of the shifted index "n" at block [[650]] 680, and the iterative searching process begins again at block 632. In this manner, the search for a pipe having a capacity equal to "j" continues until a pipe is found or the required pipe capacity exceeds the capacity of the pipe at the shifted index "n" level.